

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the applications:

### **Listing of Claims:**

Claims 1-205 (canceled)

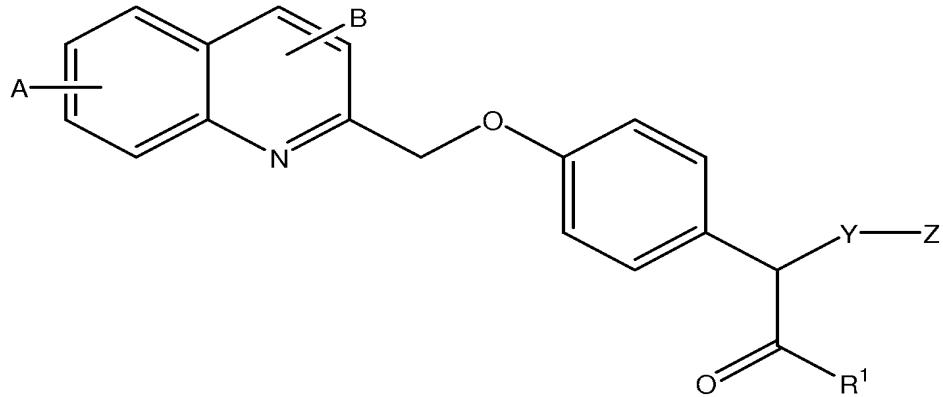
206. (currently amended) A method of reducing C-reactive protein in a human subject, comprising:

selecting a human subject at risk for ~~a disease or condition selected from the group consisting of myocardial infarction (MI), acute coronary syndrome (ACS), stroke, or peripheral arterial occlusive disease (PAOD); and~~

administering to the subject a composition comprising an agent that inhibits leukotriene synthesis *in vivo*, by inhibiting the activity of 5-Lipoxygenase activating protein (FLAP),

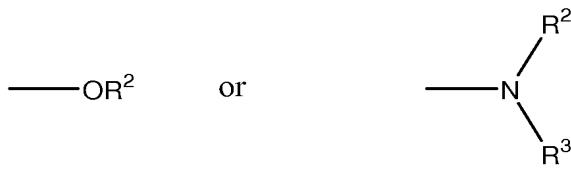
wherein the agent is administered in an amount effective to reduce serum C-reactive protein in the human subject, and

wherein the agent comprises a compound represented by the formula:

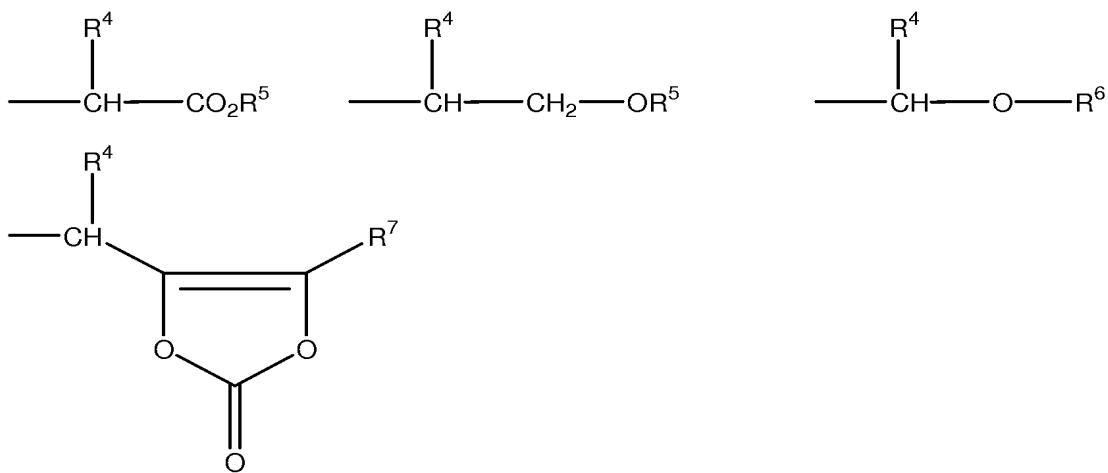


or pharmaceutically acceptable salt thereof,

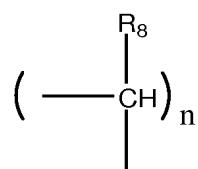
wherein  $R^1$  represents a group of the formula:



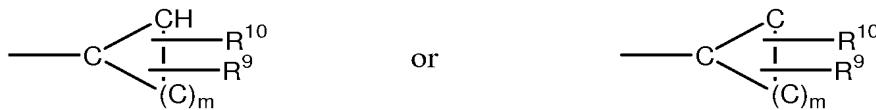
$R^2$  and  $R^3$  are identical or different and represent hydrogen, lower alkyl, phenyl, benzyl or a group of the formula:



$R^4$  represents hydrogen, lower alkyl, phenyl or benzyl, which can optionally be substituted by hydroxyl, carboxyl, lower alkoxy carbonyl, lower alkylthio, heteroaryl or carbamoyl,  $R^5$  represents hydrogen, lower alkyl, phenyl or benzyl,  $R^6$  represents a group of the formula -COR<sup>5</sup> or -CO<sup>2</sup>R<sup>5</sup>,  $R^7$  represents hydrogen, lower alkyl or phenyl, Y represents a group of the formula:



wherein  $R^8$  represents hydrogen, lower alkyl or phenyl and n denotes a number of 0 to 5, Z represents norbornyl, or represents a group of the formula:



wherein R<sup>9</sup> and R<sup>10</sup> are identical or different and denote hydrogen, lower alkyl or phenyl, or R<sup>9</sup> and R<sup>10</sup> can together form a saturated carbocyclic ring having up to 6 carbon atoms and m denotes a number from 1 to 6, and A and B are identical or different and denote hydrogen, lower alkyl or halogen, or a pharmaceutically acceptable salt thereof.

207. (withdrawn/currently amended) A method according to any one of claims 206, 209-214 and 218-224 ~~claim~~ 206, further comprising:

measuring serum C reactive protein in the human subject to monitor therapeutic efficacy of the agent, wherein a decrease in serum C-reactive protein following the administering of the agent indicates therapeutic efficacy.

208. (previously presented) A method according to claim 206, wherein the composition further comprises a physiologically acceptable carrier or excipient.

209. (previously presented) A method according to claim 206, wherein the selecting step comprises selecting a human subject susceptible to primary myocardial infarction.

210. (withdrawn) A method according to claim 206, wherein the compound is selected from the group consisting of: 2-[4-(quinolin-2-yl-methoxy)phenyl]-2-cyclopentylacetic acid, 2-[4-(quinolin-2-yl-methoxy)phenyl]-2-cyclohexylacetic acid, and 2-[4-(quinolin-2-yl-methoxy)phenyl]-2-cycloheptylacetic acid, (+)-enantiomer of 2-[4-(quinolin-2-yl-methoxy)phenyl]-2-cyclopentylacetic acid, (-)-enantiomer of 2-[4-(quinolin-2-yl-methoxy)phenyl]-2-cyclopentylacetic acid, and pharmaceutically acceptable salts thereof.

211. (previously presented) A method according to claim 206, wherein the compound is BAY-X-1005.

212. (previously presented) A method according to claim 206, wherein the compound is BAY-X-1005 or a physiologically acceptable salt, formulation, or pro-drug thereof.

213. (previously presented) A method according to claim 212, wherein the composition is administered orally.

214. (previously presented) A method according to claim 206, further comprising monitoring at least one inflammatory marker in the human subject before and during the administering step, wherein the composition is administered to reduce the level of said inflammatory marker in the human subject.

215. (withdrawn) A method according to claim 214, wherein the at least one inflammatory marker comprises myeloperoxidase (MPO).

216. (previously presented) A method according to claim 206, further comprising monitoring a leukotriene level in the subject before and during the administering step, wherein the composition is administered in an amount effective to reduce the leukotriene level in the subject.

217. (previously presented) A method according to claim 214 or 216, wherein the monitoring comprises monitoring in serum, plasma, or urine from the subject.

218. (withdrawn) A method according to claim 206, wherein the selecting step comprises measuring at least one inflammatory marker selected from the group consisting of serum myeloperoxidase (MPO) and serum C reactive protein (CRP), and selecting a susceptible subject having elevated serum MPO or elevated serum CRP as being susceptible to MI.

219. (withdrawn) A method according to claim 218, wherein the selecting step further comprises analyzing nucleic acid of a human subject for the presence or absence of at least one 5-lipoxygenase activating protein (FLAP) polymorphism that correlates with a

susceptibility to myocardial infarction, and selecting a subject with the presence of at least one such polymorphism and with the presence of elevated serum CRP or MPO.

220. (withdrawn) A method according to claim 206, wherein the selecting step comprises selecting a susceptible subject from at least one family or medical history risk factor selected from the group consisting of past or current smoker; diabetes; hypertension; serum total cholesterol > 200mg/dL; elevated serum LDL cholesterol; low serum HDL cholesterol; elevated C-reactive protein (CRP); elevated serum amyloid A; hypercholesterolemia; elevated triglycerides; elevated lp(a); obesity; acute coronary syndrome (ACS); angina; atherosclerosis; ankle/brachial index less than 0.9; transient ischemic attack; transient monocular blindness; asymptomatic carotid stenosis; claudication; limb ischemia leading to gangrene, ulceration or amputation; and surgery to restore coronary artery blood flow.

221. (withdrawn) A method according to claim 206, wherein the selecting step comprises measuring C-reactive protein (CRP) in serum of a human subject, wherein a subject with elevated CRP is identified as being at risk for MI.

222. (withdrawn) A method according to claim 206, wherein the selecting step comprises selecting a susceptible subject from measurements of serum CRP and serum low density lipoprotein cholesterol (LDL-C).

223. (withdrawn) A method according to claim 206, wherein the selecting step comprises selecting a susceptible subject from an elevated measurement of at least one inflammatory marker selected from the group consisting of C-reactive protein (CRP), serum amyloid A, fibrinogen, interleukin-6, tissue necrosis factor-alpha (TNF-alpha), soluble vascular cell adhesion molecules (sVCAM), soluble intervascular adhesion molecules (sICAM), E-selectin, matrix metalloprotease type-1, matrix metalloprotease type-2, matrix metalloprotease type-3, matrix metalloprotease type-9, myeloperoxidase (MPO), and N-tyrosine.

224. (withdrawn) A method according to claim 206, wherein the measurement is a measurement of myeloperoxidase.

225. (previously presented) A method according to claim 206, where the selecting comprises determining a FLAP genotype or haplotype of a human subject, and selecting for treatment a human subject with a FLAP genotype or haplotype that correlates with an increased risk of myocardial infarction.

226. (new) The method of claim 216, further comprising measuring serum C-reactive protein in the human subject to monitor therapeutic efficacy of the agent, wherein a decrease in serum C-reactive protein following the administering of the agent indicates therapeutic efficacy.

227. (new) The method of claim 225, wherein the selecting further comprises

measuring at least one inflammation marker selected from the group consisting of myeloperoxidase (MPO) and serum C-reactive protein (CRP), and

selecting for treatment a human subject with a FLAP genotype or haplotype that correlates with an increased risk of myocardial infarction and with elevated MPO or CRP.

228. (new) The method of claim 225, wherein the selecting further comprises

measuring at least one inflammation marker selected from the group consisting of myeloperoxidase (MPO) and serum C reactive protein (CRP), and

selecting for treatment a human subject from measurements of serum CRP and serum low density lipoprotein cholesterol (LDL-C).